

Veteran Reviewer Honored for Saving Many Days for CSR

Synthetic organic chemistry came so easy to Dr. David J. Sahn that, while his Yale classmates were busy memorizing equations, he was effortlessly visualizing how the molecules fit together.



A graduate school professor saw something special in his young protégé, who spent long, solitary hours in the lab. But the professor worried that Sahn would excel in the lab, and burn out in life. So he advised Sahn to find a way to use his talent *and* interact with people. Sahn withdrew from graduate school. Meanwhile, another professor set Sahn up with an interview at Yale School of Medicine.

Sahn so impressed the admissions faculty that they offered him a full scholarship and started him as a second-year medical student. As Sahn tells it, he studied pediatrics “because you don’t have to talk to kids; you can play with them. You don’t have to tell them what habits they should or should not have. For congenital heart disease patients, the problems they have, they were born with.”

So began his career and his commitment to medicine, science, and, ultimately, peer review. Today, Sahn is a world-renowned expert in pediatrics, cardiology radiology and areas of medical imaging whose work in peer review earned him recognition as this year’s [Marcy Speer Outstanding Reviewer Award](#) honoree. The award highlights the vital contributions the Center for Scientific Review’s 16,000 reviewers make in evaluating NIH grant applications.

Like the award’s namesake, who remained committed to reviewing applications even as she faced terminal cancer, Sahn is as devoted to peer review as he is to science.

“It’s a privilege and one of the most enjoyable, educational aspects of my career,” he said of his work in peer review. “I wouldn’t have missed it for the world. I am looking forward to at least five more years.”

Sahn served two four-year terms on the Diagnostic Radiology study section, and since 1994, he has served on special and regular review panels 34 times, serving either as a chairman or a temporary reviewer. He adds critical clinical experience vital to sound peer review, and has done so under challenging conditions, filling in for reviewers who unexpectedly are unable to attend their scheduled meetings. One such scenario, detailed in Sahn’s award nomination, drew the attention of the award committee.

Sahn was asked on two days’ notice to fill in as chairman of a special review panel for a reviewer who had a family emergency. Not only did he attend the meeting and serve as chairman, he had read all the applications to be discussed and provided a vital clinical perspective essential for review. One member of the award committee lauded Dr. Sahn as having “saved the day for CSR.”

Sahn wrote his first grant application in 1973 for a five-year, \$250,000 investigation. The National Institutes of Health turned him down. The reviewers said he was too young and early in his career to run a program of that magnitude. Undeterred, Sahn dedicated himself to academic imaging, science and writing grants, going on to be a very prolific and successful principal investigator for grants from the American Heart Association, the Optical Imaging Institute, the Department of Defense and, yes, NIH.



Beyond working as a professor of pediatrics, diagnostic radiology and bioengineering and heading of the Interdisciplinary Cardiac Imaging program at Oregon Health & Science University, he currently is the principal investigator for two grants, one from DOD and the other NIH.

What drives him to commit his time to reviewing grant applications? He addressed this and other issues in a recent interview.

Why did you choose to become a reviewer?

I did it first as an ad hoc to find out about the process in my area and I realized I was sitting with the cream of the crop, brilliant scientists on the clinical and technical side. I was always a minority, a clinical cardiologist, not an engineer. So it was my job to defend cardiology science and explain it. I felt it was my obligation, honor and duty as pay back for the funding that I received to be part of the process of reviewing science. It's just a tremendous privilege to understand what good science is, to understand why a grant is written well enough that it is fundable the first time around, and to listen to the critiques and observe the process.

What would you say to a principal investigator debating whether or not to be a reviewer?

You learn how to be a better PI. You learn how to write grants and what the process is of how they are reviewed. You listen to discussion. You learn intellectual and academic decorum and how people respond to critiques of their ideas and their work. Some people find it very hard to accept someone else's critique of their science. But there is a process. When you listen to what someone is saying, and if you disagree with it, you have to disagree cordially and responsibly. You learn a lot about people and how to do things better. My idea of what is good science has been vastly expanded by my participation and contribution in the review process.

What were the key lessons you learned reviewing applications?

You learn what good science is, how to write it, structure it, defend it and how to respond to the review process.

What is the most valuable advice you can give to an applicant?

Writing grants is different than writing papers. You have to really be clear. One of the features of a good grant is a section where you state what anticipated problems you might come upon as you work through this investigation. You have to then write what

alternate strategies you might use if you come up against something that doesn't work the way you expect it to.

What is your view on the changes in peer review?

Study sections are being restructured to be still multi-disciplined but more focused. I know there is a massive number of increased submissions since funding is down, and there are lots of resubmissions.... One of the hardest changes occurred in the late 80s, early 90s, when we began triaging grants, placing grants in the lower 50 percent that we don't think are competitive. That happened because the meetings were three days long, which was hard. Now they are a day or day and a half long.

I still worry about grants that are unscored because two or three reviewers don't think they are competitive. The fact that they are not discussed still bothers me because we don't have the learning experience of really talking about those grants in detail. But unscored is a solution. It works. It's fair. The guidelines are that anyone at the table can say 'I disagree' and then it gets discussed....

Shorter meetings are better, since lots of rooms don't have windows. I have a hunch that when people stand at a window looking at the Pacific they may give better scores [*he says with a chuckle*]. I like the idea of having study sections move around.

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